

Maryland Waste Diversion Activities Report

– 2003 –

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Overview

Introduction

The Maryland Department of the Environment promotes and encourages waste diversion across the State. The 2003 Maryland Waste Diversion Activities Report meets the reporting requirements of Environment Article Section 9-1702 that mandates a report to the Governor and General Assembly on the status of recycling in Maryland. The promotion and encouragement of waste diversion is accomplished by partnering with Maryland's jurisdictions and the public and private sectors to develop markets for recyclable materials and by working with other State agencies to increase the volume of materials that are diverted from landfills. These programs contribute toward MDE's achievement of the outcomes outlined in *Managing Maryland for Results (MFR)*, MDE's results-based planning and management approach for achieving its public health and environmental protection goals.



This report provides an overview of the waste diversion activities during calendar year 2002. Data contained in this Report comes from annual reports submitted to MDE by Maryland's 23 Counties, Baltimore City, and the State government agencies participating in the All StAR (All State Agencies Recycle) Program. Counties also provide MDE information on their collection programs, institutional recycling programs, public education efforts, source reduction activities, and disposal facilities.

Maryland's Legislative Mandate

In 1988, the **Maryland Recycling Act (MRA)** authorized MDE to reduce the disposal of solid waste in Maryland through management, education and regulation. The MRA requires that:

- Each jurisdiction develop and implement recycling programs by January 1, 1994. Jurisdictions with populations greater than 150,000 are required to recycle 20% or more of their waste and jurisdictions with populations less than 150,000 are required to recycle 15% or more of their waste. In no case is the recycling rate to be less than 10%.
- Each jurisdiction select materials to be recycled and the manner in which materials are to be separated and processed. If a jurisdiction fails to meet the specified reductions, State and local authorities can prohibit the issuance of building permits for all new construction.
- State Government reduce by recycling the amount of the solid waste stream generated for disposal by at least 20% or to an amount that is determined practical and economically feasible, but in no case may the amount to be recycled be less than 10%.
- Newsprint and telephone directories distributed in the State have a recycled content, by weight, of 35% in 2003, increasing to 40% by 2005.

The MRA excludes from its scope scrap metal, landclearing debris, construction and demolition debris, sewage sludge, and hospital wastes.

Additional legislation impacting recycling in Maryland includes:

- ▶ Banning separately collected yard waste from disposal at solid waste acceptance facilities (1994).
- ▶ Requiring permits for private natural wood waste recycling facilities (1992).
- ▶ Consideration by Counties regarding the feasibility of composting solid waste when developing solid waste management plans (1992).
- ▶ Including composting in the calculation of the recycling rate (1992).
- ▶ Requiring mercuric oxide battery manufacturers to be responsible for the collection, transportation, and recycling or disposal of these batteries sold or offered for promotional purposes in the state (1994).
- ▶ Establishing a program or system for the collection, recycling, or disposal of each cell, rechargeable battery or rechargeable product sold in the state (1994).
- ▶ Establishing a voluntary, statewide waste diversion goal of 40% by the year 2005, consisting of a 35% MRA recycling rate plus up to 5% credit for source reduction activities (2000).
- ▶ Reducing the impact of mercury in the environment by requiring that MDE provide outreach assistance to schools, businesses, and the general public relating to the proper management and recycling of mercury containing products. The law also prohibits the sale of mercury thermometers beginning in 2002 (2001).



Waste Diversion in Maryland in 2002 – A Snapshot

Maryland's 39.5% Waste Diversion Rate

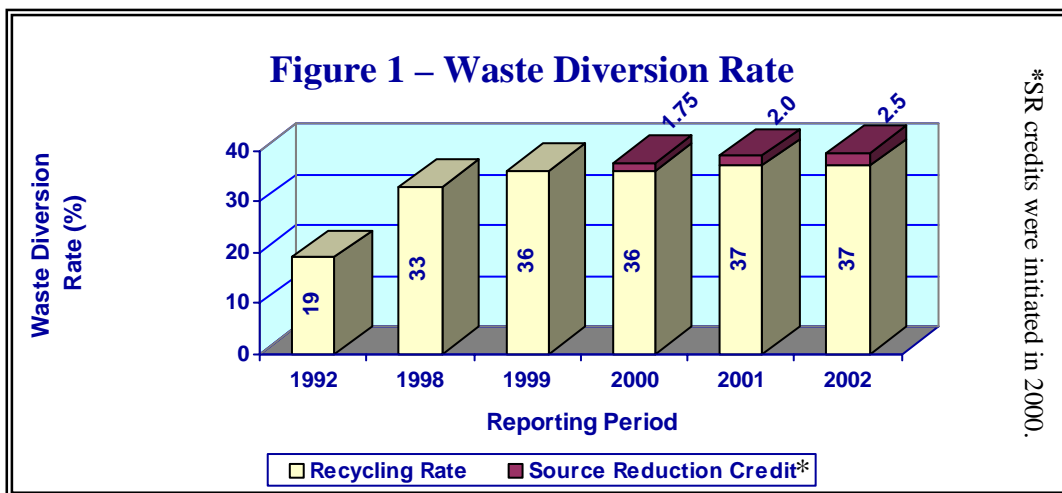
The source reduction (SR) credit plus the recycling rate make up the waste diversion rate. Through the efforts of its citizens, businesses and government agencies, Maryland achieved a statewide waste diversion rate of 39.5% in 2002. The 39.5% was composed of a 37% MRA recycling rate and a 2.5% source reduction credit. This exceeds the requirements of the MRA and is just shy of the 40% waste diversion goal targeted for 2005. Figure 1 provides a historical breakdown of Maryland's waste diversion rate.

Maryland's 2.5% Source Reduction Credit

Calendar year 2002 marked the third year that Maryland's jurisdictions received credit for SR activities. Thirteen (13) Maryland jurisdictions were able to add from 1% to 5% to their waste diversion rate by emphasizing SR activities

as a waste reduction strategy. They accomplished this utilizing Internet resources, demonstration sites (*e.g.*, backyard composting), and publications on reuse practices and yard waste reduction. A complete list of available SR activities and the breakdown of Maryland SR activities in calendar year 2002 is available at www.mde.state.md.us/assets/document/recycling/SRChecklist_results_01.pdf.

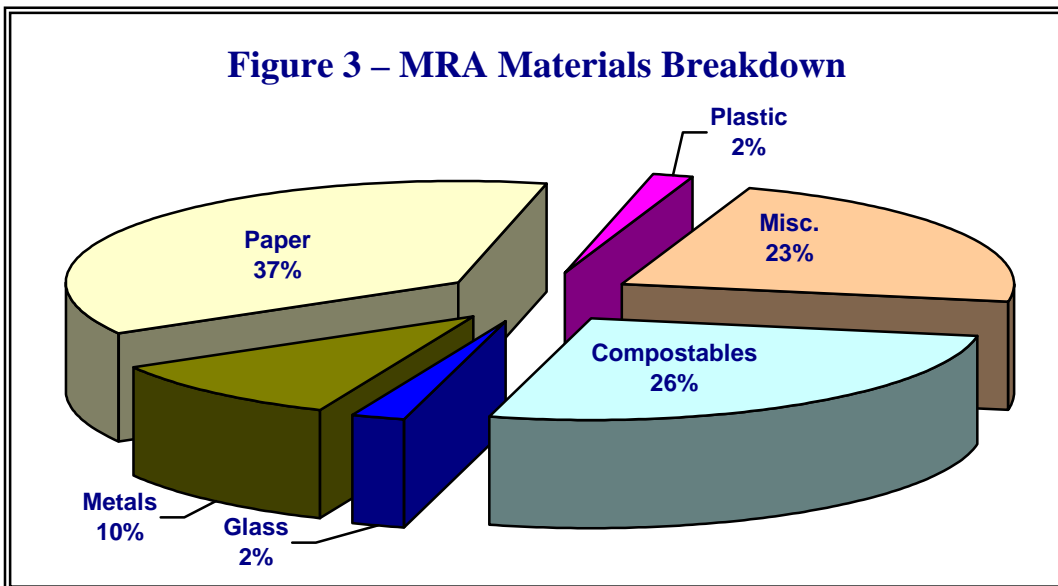
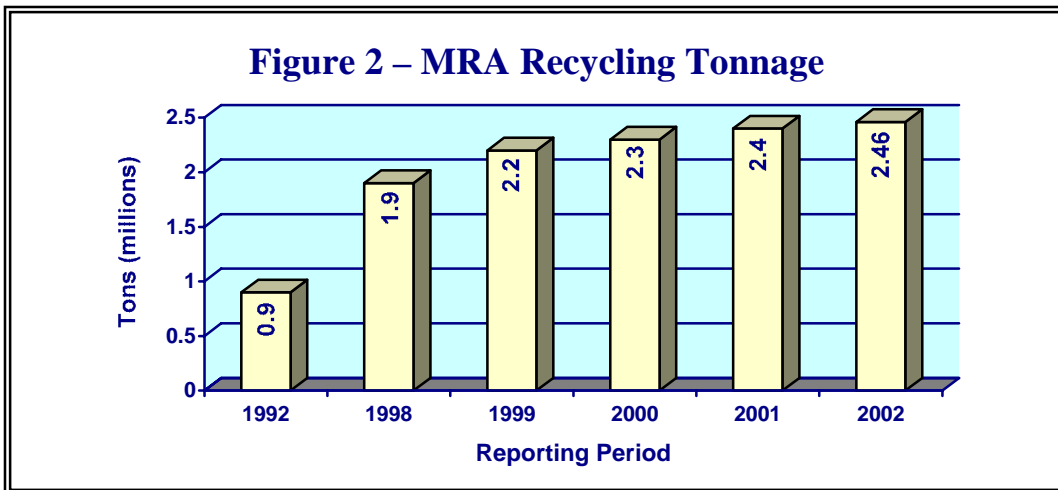
Non-profit groups are partnering with government to increase awareness of source reduction and reuse opportunities for materials such as linens, pet supplies, medical equipment, clothing and computers. The partnering provides businesses information on how to improve their bottom line through recycling and SR. As counties learn from their successful colleagues, even more SR programs are expected. As an example, Maryland spent just over \$2.5 million on 3,000 tons of recycled paper in fiscal year 2003. This represents 400 tons less paper than was purchased just 2 years ago in fiscal year 2001. At a minimum, the reduction of paper purchased translates to a savings of \$333,333.



Maryland's 37% Recycling Rate

In 2002, Maryland residents and businesses recycled 37% (MRA recycling tonnage ÷ MRA recycling tonnage + MRA waste disposed) of the municipal solid waste they generated. While this rate is good news, it continues the national trend toward the stabilization of recycling rates. To combat this, states across the country are seeking new ways to ensure that recycling continues to increase its slice of the waste management pie. Like Maryland, many states are investigating new commodities to bring into the recycling stream, while continuing to increase their outreach efforts.

Figure 2 tracks the recycling tonnages since 1992 and Figure 3 categorizes the total MRA tons recycled by material in calendar year 2002. As expected, paper recycling composed the largest portion of materials recycled followed closely by compostable materials.



Beyond the Maryland Recycling Act

MDE encourages the recycling of all materials because of the environmental and economic benefits that recycling provides. Table 1 details recycling and waste diversion totals for each of Maryland's jurisdictions. Business and local governments continue to seek recycling opportunities above and beyond those that apply toward the MRA rate. In fact, 2.9 million tons of other Non-MRA materials were reported as being recycled in 2002. Table 2 offers a breakdown by category of the amount of Non-MRA materials reported recycled in 2002. For a complete overview on how solid waste is managed in Maryland, refer to the annual "Solid Waste Managed In Maryland" report available each Fall on MDE's web site at www.mde.state.md.us/Land/land_publications/index.asp.

Table 1 – County Recyclables by Commodity in Tons for Calendar Year 2002

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2002

County	MRA Rate ³	Waste Diversion Rate ⁴	Maryland Recycling Act (MRA) Materials							Non-MRA Recyclables ⁵	Total Recycling
			Compostables	Glass	Metals	Paper	Plastic	Misc.	Subtotal		
Allegany	25%	27%	2,424	146	665	5,591	493	10,024	19,343	9,387	28,730
Anne Arundel	42%	44%	133,617	7,744	22,782	98,430	4,074	61,291	327,938	723,952	1,051,890
Baltimore Region ¹	40%	42%	135,759	7,759	43,395	246,346	17,144	262,417	712,820	77,653	790,473
Calvert	32%	33%	17,515	556	2,902	4,516	153	541	26,183	24,593	50,776
Carroll	46%	48%	21,218	1,559	5,916	36,611	437	21,867	87,608	21,940	109,548
Cecil	28%	28%	18,787	351	1,265	1,920	887	609	23,819	11,189	35,008
Charles	29%	34%	10,228	779	5,546	18,919	398	1,329	37,199	20,211	57,410
Dorchester	31%	31%	695	48	416	732	69	14,925	16,885	3,212	20,097
Frederick	40%	42%	18,854	2,126	7,040	53,745	774	11,648	94,187	21,381	115,568
Garrett	16%	17%	1,104	172	418	929	19	1,720	4,362	215,781	220,143
Harford	51%	56%	48,162	1,461	7,775	51,298	471	34,299	143,466	40,278	183,744
Howard	40%	43%	38,727	3,422	4,802	57,333	1,280	5,974	111,538	72,506	184,044
Mid-Shore ²	39%	39%	7,559	894	2,773	23,097	370	45,402	80,095	22,039	102,134
Montgomery	30%	35%	86,951	15,264	72,972	138,078	4,665	4,289	322,219	22,652	344,871
Prince George's	36%	39%	82,513	10,427	55,028	133,073	3,956	16,802	301,799	207,521	509,320
Somerset	28%	28%	120	0	935	181	16	6,005	7,257	0	7,257
St. Mary's	22%	24%	2,171	488	2,746	9,441	184	736	15,766	43,228	58,994
Washington	24%	24%	4,993	583	6,374	14,404	143	1,621	28,118	18,551	46,669
Wicomico	22%	22%	12,032	652	2,548	11,154	331	898	27,615	11,607	39,222
Worcester	44%	44%	1,801	1,050	5,405	3,649	66	55,653	67,624	43,000	110,624
State Highways and County Roads Estimates of Additional Asphalt and Concrete Recycled										1,284,818	1,284,818
TOTAL	37%	39.5%	645,230*	55,481*	251,703*	909,447*	35,930*	558,050*	2,455,843*	2,895,499*	5,351,342*

* Due to rounding, tonnage totals in this table may differ slightly from the sum of actual table values.

¹ Baltimore Region includes Baltimore City and Baltimore County. The region's 2% SR credit is Baltimore County's 4% SR credit prorated over the region.

² Mid-Shore Regional Recycling Program includes Caroline, Kent, Queen Anne's and Talbot Counties.

³ MRA Rate = MRA recycling tonnage ÷ (MRA recycling tonnage + MRA waste) x 100.

⁴ Waste Diversion Rate = Recycling Rate + Source Reduction (SR) Credit (based on voluntary reporting of SR activities). **Bolded** rates include both recycling and SR activities.

⁵ Column includes materials, such as construction and demolition debris, land clearing debris and recycled fluids that fall outside the scope of the Maryland Recycling Act but are reported by the counties as recycled materials.

Table 2 – Recycling of Non-MRA Materials in Tons

*Compiled by the Maryland Department of the Environment
from Reports Submitted for Calendar Year 2002*

MATERIAL	TONS RECYCLED
Antifreeze	1,937
Asphalt	1,292,472
Coal Ash	542,134
Concrete	354,356
Construction/Demolition Debris.	140,437
Land Clearing Debris	13,568
Roofing Shingles	615
Scrap Metal	291,697
Scrap Automobiles	148,171
Soils	18,954
Waste Oil	26,202
Other Materials	64,956
TOTAL	2,895,499

All StAR (All State Agencies Recycle)

The MRA mandates that State government achieve a waste reduction goal of at least 20%, or an amount that is determined "practical and economically feasible", but in no case less than 10%.

The All StAR (**All State Agencies Recycle**) program is the name of the State government agency recycling program. All StAR agencies designate a Recycling Coordinator to manage their various sites throughout Maryland. They provide technical support to encourage recycling at their agencies' sites and to facilitate reporting on collection activities. State agencies recycled 14,581 tons of MRA materials for a MRA recycling rate of 19.3% in 2002. Additionally, State government recycled 128,324 tons of non-MRA materials such as construction and demolition debris, antifreeze, motor oil, scrap metal, landclearing debris, concrete, and asphalt just to name a few. A complete breakdown of the All StAR statistics is available under "State Agency Recycling" on MDE's web page at www.mde.state.md.us/recycling. Table 3 illustrates the performance of each State agency participating in the All StAR program.



On March 13, 2001, then Governor Glendening signed Executive Order 01.01.2001.02 *Sustaining Maryland's Future with Clean Power, Green Buildings and Energy Efficiency*. The Executive Order re-energized Maryland's commitment to State government recycling by setting January 1, 2003, as a target date for State agencies to begin to annually divert or recycle at least 20% of the waste they generate.

Table 3 – Maryland State Agencies' 2002 Recycling Rates

Compiled by the Maryland Department of the Environment from Reports Submitted for Calendar Year 2002

Agency Name	No. of Sites	No. of Sites Reporting	No. of People*	Total MRA 2002 (tons)	2002 MRA Recycling Rate (%)^
Dept. of General Services	17	17	8,645	621.91	30.8
Dept. of Labor, Licensing & Regulation	15	15	1,252	65.15	10.9
Dept. of Agriculture	3	3	302	83.25	49.2
MD Public Broadcasting Commission	1	1	195	14.56	20.7
Comptroller of the Treasury	1	1	940	212.67	50.6
MD School for the Deaf	2	2	882	62.41	21.4
Dept. of Natural Resources	7	7	821	32.78	28.1
Dept. of Juvenile Services	14	0	2,283	NR	NR
MD State Archives	1	1	80	5.70	26.8
Dept. of the Environment	1	1	930	149.89	58.0
Dept. of Transportation	58	58	17,542	3,681.87	20.1
Dept. of Health and Mental Hygiene	18	11	9,259	1,042.98	14.9
MD General Assembly	1	1	1,223	174.63	39.7
Dept. of Public Safety and Correctional Services	30	30	36,580	1,777.79	10.2
Dept. of Human Resources	16	12	5,294	73.46	24.1
State Dept. of Assessments and Taxation	2	2	220	1.54	6.5
University of Maryland System	15	13	116,725	5,095.14	24.0
St. Mary's College of MD	1	1	1,850	338.08	34.1
Morgan State University	1	1	7,100	116.75	15.3
Dept. of Education	2	1	600	58.03	38.9
MD Automobile Insurance Fund	1	1	542	43.53	29.5
MD Stadium Authority	1	1	2,100	491.00	20.3
Baltimore City Community College	1	1	2,300	15.03	1.7
MD Environmental Service	1	1	144	11.94	27.7
MD Food Center Authority	1	1	20	0.00	0.0
Judiciary of MD	1	1	142	13.18	25.8
Subsequent Injury Fund Board	1	1	18	1.00	15.4
Dept. of Veterans Affairs	5	5	36	36.53	48.4
Dept. of Budget and Management	1	1	250	6.41	15.4
MD State Police	37	37	2,238	207.19	22.9
Dept. of Business and Economic Development	1	1	650	33.35	30.9
MD Higher Education Commission	1	1	86	3.21	23.6
Dept. of Housing and Community Development	1	1	490	100.10	83.3
MD Insurance Administration	1	1	265	10.00	20.4
TOTALS	260	232	222,004	14,581	19.3

* State employees comprise approximately 78,585 of the total number of people at State Agencies.

^ The 1988 Maryland Recycling Act mandates a State Government recycling rate of at least 20%.

Less than 100% reporting

Increase in MRA tonnage over 2001

NR – Did Not Report

As a result of past All StAR performance and the Executive Order, a Pollution Prevention workgroup led by MDE was formed to address and make recommendations to improving recycling in State government buildings. The recommendations are available online at www.dgs.state.md.us/GreenBuildings/default.htm.

MDE continues to encourage State agencies to expand their recycling programs. MDE recycling staff offers technical support and on-site expertise to All StAR recycling coordinators to help implement and improve recycling at State agencies. The "State Agency Recycling" section of MDE's recycling web page also contains an on-line directory of recycling collection contractors and the quarterly on-line *All StAR News* newsletter detailing success stories and recommendations on how agencies can implement improvements to their recycling program.

How MDE Supports Recycling in Maryland

Promoting Recycled Products



The collection, sorting, and use of recycled materials in the manufacturing of new products are just part of the recycling process. Once manufacturers turn recyclables into products, it becomes everybody's responsibility to "close the loop" and buy products made of recycled material. MDE works to create demand for these products by:

- ✦ Promoting a Buy Recycled training manual and program developed by the Maryland Environmental Service (MES) for local and state government purchasing agents. The training manual provides information on increasing purchases of products made with recycled materials.
- ✦ Distributing a Buy Recycled brochure at the Baltimore Public Works Museum (BPWM) to educate visitors on the benefits of buying recycled, how to identify recycled content products and website links. The BPWM gift shop also carries a variety of items for sale that contain recycled materials.
- ✦ Displaying recycled content items on MDE's exhibit panels that travel to school fairs, conferences, outreach events etc. The promotion of recycled content items and the recycling process are also discussed in presentations given to school children in grades K-12th.

MDE encourages State government to increase the use of products made with recycled materials by supporting procurement initiatives:

- ❖ State government is required to purchase products with recycled content whenever practicable. A 5% pricing preference over similar items not made from recycled material is allowed.
- ❖ MDE works cooperatively with the Maryland Department of General Services (DGS) to promote government purchasing of materials with recycled content.

- In FY 2003, DGS purchased \$2,542,329 worth or 3,004 tons (98% by weight) of recycled content paper products.
- DGS maintains a list of a variety of products with recycled content such as picnic tables, park benches, and re-refined motor oil.
- Boilerplate language stating, "All products used in packing to cushion and protect during the shipment of commodities are to be made of recycled, recyclable, and/or biodegradable materials" is included on all Maryland Invitation to Bid Solicitations and Purchase Orders.



Special Programs

In 2002, MDE worked to implement programs designed to expand recycling and protect public health and the environment.

eCycling

Computer and consumer electronics are a rapidly growing part of the waste stream. The environmental and health threats posed by computers and consumer electronics, that contain toxic materials such as lead, mercury, cadmium, and chromium, continue to raise concerns about their disposal.

To address these concerns, Maryland, in partnership with Delaware, Pennsylvania, Virginia, West Virginia, the District of Columbia, and EPA Region III, is working under the Region III eCycling Project initiative, to develop a long-term solution to the challenge of computer and consumer electronic product recovery and recycling. Phase I of the



project brought together electronics manufacturers, retailers, recyclers, waste transporters, and local and state governments, to evaluate different collection and recycling systems. Some of the systems evaluated included:

- * one-day special collection events;
- * multi-day special collection events;
- * permanent collection drop-off sites;
- * collection events free to the public;
- * collection events that charge user fees;
- * events at solid waste facility locations;
- * events at retail, park, and office parking lot locations; and
- * events held in conjunction with household hazardous waste collection activities.

Highlights of the program in Maryland include:

- ✓ The collection of 8 tons of electronic equipment at Maryland's kick-off eCycling event held in Harford County on October 27, 2001.
- ✓ A partnership with MDE, White Flint Mall, and the National Institutes of Health that resulted in the collection of over 34 tons of electronic equipment from 700 participants at an eCycling event held at White Flint Mall in North Bethesda on April 12th, 2002. Also, working with the local Girl Scouts, the 103 cell phones collected were donated to the Wireless Foundation's, "*Call to Protect*" campaign. The *Call To Protect* campaign collects wireless phones to distribute to victims of domestic violence.
- ✓ The collection of 9 tons of electronic equipment from MDE, and other State and Local government employees at a two-day eCycling event held at MDE headquarters at Montgomery Park on April 10th and 11th, 2002.
- ✓ A 30 second advertisement promoting computer recycling aired on WBAL-TV on Earth Day 2002 (April 22, 2002).
- ✓ The placement of eCycling information in all telephone books distributed in Maryland, Pennsylvania, Delaware, Virginia, West Virginia and the District of Columbia in 2003. The information lists eCycling web sites and encourages people to donate, reuse, or recycle their electronics.
- ✓ The development of a partnership between MDE and MarketPro Inc., the largest consumer computer show promoter in the United States. The partnership allows MDE to distribute information on eCycling in Maryland MarketPro electronic shows.
- ✓ The implementation of permanent collection programs in Howard, Montgomery, Prince George's and Wicomico Counties.
- ✓ eCycling events were offered to residents and small businesses in 21 of 23 Maryland Counties and Baltimore City.
- ✓ 1,420 tons of electronic equipment has been collected since the program began.

Information on eCycling is available under "*Special Projects*" on MDE's recycling web page at www.mde.state.md.us/recycling. Table 4 gives a breakdown of the electronic equipment collected. Discussions are now in progress regarding Phase II of this project: Implementing a Shared Responsibility Model. MDE continues to seek funding to promote the recycling of electronics throughout the State.

Mercury Recycling

MDE works to comply with 2001 mercury legislation entitled "*Mercury and Products that Contain Mercury*" (*Environment Article, Subtitle 9 Sections 6-904 through 6-907*). The law requires MDE to provide outreach assistance to schools relating to the proper management, recycling, and disposal of mercury and mercury-added products. MDE is also required to implement a public

Table 4 – eCycling Events

County	Population	Type	Date(s)	No. of participants	Tons collected	Pounds collected	Pounds/participant
2001	349,777	–	–	245	13.63	27,260	111
Allegany	74,930	one-day	04/20/02 06/14/03	300 108	17.61 7.12	35,229 14,233	117 132
Anne Arundel	489,656	one-day	06/08/02 04/05/03	654 387	18.72 18.95	37,440 37,898	54 98
Baltimore	754,292	one-day	04/27/02 11/23/02 05/31/03	450 365 725	18.16 16.30 28.98	36,324 32,600 57,969	81 89 80
Balt. City	651,154	one-day two-day	08/10/02 4/10-11/03	402 79	21.5 8.98	43,000 17,941	107 272
Calvert	74,563	one-day	08/24/02 05/10/03	47 92	3.09 4.31	6,184 8,615	132 94
Carroll	150,897	one-day	04/27/02 10/19/02 07/12/03	250 174 305	11.40 6.39 15.80	22,809 12,773 31,600	91 73 103
Cecil	85,951	one-day	04/20/02	30	1.40	2,806	94
Charles	120,546	one-day	09/28/02 06/28/03	175 220	13.00 16.84	26,006 33,685	143 153
Dorchester	30,674	one-day	10/05/02	5	0.27	529	106
Frederick	195,277	two-day	6/28-29/02	117	6.93	13,856	118
Garrett	29,846	one-day	08/02/03	67	6.16	12,328	184
Harford	218,590	one-day	01/19/02 04/20/02 09/14/02 08/09/03	200 800 875 414	8.94 19.79 21.00 33.11	17,883 39,589 42,000 66,216	89 49 48 160
Midshore*	123,344	one-day	04/21/02 11/02/02 06/07/03	185 175 170	6.97 9.14 10.55	13,943 18,270 21,100	75 104 124
Montgomery	873,341	one-day	04/12/03	670	34.10	68,106	102
St. Mary's	86,211	one-day	06/15/02 08/16/03	109 115	15.70 6.27	31,401 12,540	288 109
Worcester	46,543	one-day	04/20/02 10/26/02 04/26/03	82 82 50	5.29 4.98 2.25	10,578 9,963 4,501	129 122 90
Total				9,124	433.63	867,175	115 (AVG)

* Midshore is composed of Kent, Queen Anne's, Talbot, and Caroline Counties.

** An additional 977.34 tons were collected at the 4 permanent locations (*i.e.*, Wicomico – 13.10, Prince George's – 97.11, Montgomery – 637.84, and Howard – 229.29).

*** The City of Salisbury collected 9.06 tons during curbside pickup events that ran on 01/4/03 and 01/11/03.

education, outreach and assistance program relating to the hazards of mercury, requirements of this law, and voluntary efforts to help reduce mercury in the environment.

In conjunction with County Environmental Health Directors and Officers, MDE worked to develop and disseminate general information and information for

children on mercury and mercury-containing products. The resulting fact sheets are available in the "Mercury Recycling" section of MDE's recycling web page at www.mde.state.md.us/recycling.



Other materials developed by MDE include information on managing small mercury spills, lists of mercury recyclers, and mercury fish advisories. These materials are also available on the MDE website. Additionally, MDE worked with WBAL-TV to produce a 15 second television commercial that described the hazards of mercury, announced mercury collection events, and provided information sources. The commercial aired on WBAL 11 Baltimore, WBOC 16 Salisbury, and WHAG-NBC 25 Hagerstown in March 2003, for approximately 10 days. To comply with other requirements of the legislation MDE collaborated with others and implemented the following:

- ✧ In the spring of 2003, MDE trained Maryland Environmental Service (MES) personnel to work with The Children's Environmental Health and Protection Advisory Council to inventory and collect mercury found in schools;
- ✧ A web-based and interactive public education, outreach and assistance program for citizens and businesses relating to the hazards of mercury and the efforts that can be taken to reduce mercury was developed;
- ✧ Outreach assistance to schools was provided on the proper management and recycling of mercury and mercury-added products;
- ✧ Public outreach alerts on the statewide fish consumption advisories were initiated;
- ✧ MDE worked with the American Hospital Association (AHA) and instituted the "Hospitals for a Healthy Environment" campaign. This is a voluntary program that encourages hospitals to support goals to eliminate mercury waste by 2005 and reduce total waste by 50% by 2010;
- ✧ MDE worked with the Maryland Dental Association (MSDA) to develop a brochure on best management practices for dental amalgam disposal;
- ✧ The Maryland Retailers Association assisted with increasing awareness of the imminent prohibition on the sale of mercury fever thermometers;
- ✧ The Air Conditioning Contractors of America assisted with increasing participation in the Thermostat Recycling Corporation's thermostat collection and recycling program; and
- ✧ MDE worked with the Board of Public Works and DGS to ensure procurement of Mercury-free products.

MDE also partnered with local governments, CVS Pharmacy and EPIC Pharmacy, to establish permanent mercury thermometer collection locations throughout the State. The locations collect used mercury fever thermometers and exchange them for new digital thermometers. Other mercury products are also collected at these locations. Table 5 is a list of established mercury recycling drop-off locations.

Table 5 – Established Mercury Drop-off Locations

Facility	Location	County	Contacts
Allegany County Health Department	PO Box 1745 Willowbrook Road Cumberland, MD 21501	Allegany	Walter Finster 301-777-5654
Maryland Dept. of Environment HQ	1800 Washington Blvd. Suite 610 Baltimore, MD 21230	Baltimore City	Herb Meade 410-537-3336
Calvert County Solid Waste Facility	Appeal Landfill Sweet Water Road Lusby, MD 20657	Calvert	Shirley Steffey 410-326-0210
Carroll County Health Department	290 South Center Street PO Box 845 Westminster, MD 21158	Carroll	Charles Zeleski 410-857 – 5009
Cecil County Health Department	401 Bow Street Elkton, MD 21921	Cecil	Chuck Smyser 410-996-5160
Charles County Dept. of Public Facilities	1001 Radio Station Road LaPlata, MD 20646	Charles	Lowry Phelps 301-932-3440
Dorchester County Health Department	3 Cedar Street Cambridge, MD 21613	Dorchester	Bill Forlifer 410-228-1167
Garrett County Health Department	1025 Memorial Drive Oakland, MD 21550	Garrett	Steve Sherrard 301-334-7760
Kent County Health Department	125 Lynchburg Street Chestertown, MD 21620	Kent	Ed Birkmire 410-778-1350
Queen Anne's County Health Dept., Clinical Programs	206 N. Commerce Street Centreville, MD 21617	Queen Anne's	Connie Ralph 410-758-0720
Washington County Health Department	13332 Pennsylvania Ave. Hagerstown, MD 21742	Washington	Laurie Bucher 301-791-3270
City of Salisbury Fire Department	Station 16 Headquarters 143 South Division Street Salisbury, MD 21801	Wicomico	Ed Werkheiser 410-548-3125
Worcester County Health Department	6040 Public Landing Road Snow Hill, MD 21863	Worcester	Bruce Stevens 410-632-1100

Finally, in addition to the established mercury drop-offs, MDE is partnering with MES on the Joint eCycling and Mercury Thermometer Exchange Project. The Project pays for 74% of the costs associated with special mercury drop-off and eCycling events. The 14 participating counties assume the remaining costs of the event. As of September 17, 2003, ten events have taken place in Allegany, Calvert, Charles, Garrett, Harford, Kent, Prince George's, St. Mary's, Wicomico, and Worcester Counties.

Business Resources

MDE provides assistance to businesses that are interested in participating in Maryland's recycling program by guiding them through the State regulatory framework, consulting on recycling program implementation, and locating markets for recyclable materials. The following provides a more detailed description of these activities.

Market Locator

The success of Maryland's recycling programs is linked to finding markets for the materials collected. Figure 4 illustrates the locations of the State's material recovery facilities (MRFs). These facilities are strategically located to ensure that materials reach their market economically.



Businesses can access the Maryland Recycling Market Directory at www.mde.state.md.us/recycling to find a market for recyclable materials. The web site is designed to promote commercial recycling in Maryland and is searchable by commodity.

Businesses can also check the homepage of the Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO) at www.libertynet.org/macredo for regional markets. The database is searchable by business name, commodity group, facility type, member state, and metropolitan area and/or zip code. For companies without access to the Internet, MDE can mail out or fax a list of markets by material (e.g., paper recyclers).

Permitting Issues

Two fact sheets are available to assist recycling and composting businesses in understanding environmental permitting procedures and requirements.

Local Permitting Issues for Recycling and Composting Facilities – Lists various local permits and approvals that may be required of recycling and composting businesses. It also gives information on how to contact local economic development staff as points of contact at the county level for any business considering locating or expanding in a specific jurisdiction. This factsheet is available by request or by going to the MDE's recycling web page at www.mde.state.md.us/recycling and clicking on “Education and Outreach”.

Solving the Permit Puzzle in Maryland – Outlines common State permit procedures and permits that may be required of recycling and composting businesses. MDE's Environmental Permit Service Center (EPSC) is the point of contact for information and assistance. The EPSC can be reached at 410-537-3772 or 800-633-6101, x3772. This booklet is available by request or by going to the MDE's recycling web page at www.mde.state.md.us/recycling and clicking on “Education and Outreach”.

Waste Diversion Guide

The *Commercial Waste Diversion Implementation Guide* assists local government recycling coordinators who are working with businesses to promote recycling and source reduction. Case studies detailing successful commercial

Figure 4 – Material Recovery Facilities (MRFs) in Maryland



Baltimore County

1. Baltimore Resource Recovery Facility
10320 York Road
Cockeysville, MD 21030
Ph: 410-628-1130 Fx: 410-974-7254

Montgomery County

2. Montgomery County MRF
16105 Frederick Road
Derwood, MD 20855
Ph: 301-417-1433

Prince George's County

3. Georgetown Paper Stock Company, Inc.
4501 46th Street
P.O. Box 406
Bladensburg, MD 20710
Ph: 301-864-1200

4. Universal Recycling
1000 Ritchie Road
Capitol Heights, MD 20743
Ph: 301-336-5932 Fx: 301-499-7138

5. Prince George's County MRF
1000 Ritchie Road
Capitol Heights, MD 20743
Ph: 301-499-1707 Fx: 301-499-7138

Washington County

6. Browning Ferris Industries, Inc.
11710 Green Castle Pike
Hagerstown, MD 21740
Ph: 301-223-5952

Worcester County

7. Ocean City Recycling Center
210 65th Street
Ocean City, MD 21842
Ph: 410-524-5356 Fx: 410-723-1832

waste diversion efforts are provided. The guide is available on the MDE web site www.mde.state.md.us/assets/document/recycling/commercialwasteguide.pdf.

Education and Outreach

As State and County recycling programs mature, it is important for MDE to maintain a high profile and regularly promote the benefits of recycling and waste reduction to a variety of

audiences. In calendar year 2002, MDE continued to emphasize public education through outreach efforts such as television commercials, classroom instruction, and special events.

TV Commercials

Channel 16 WBOC Salisbury produced and aired a 15-second television announcement that educated viewers on the hazards of mercury and encouraged them to drop off their mercury thermometers at collection sites.

WBAL-TV aired a series of eCycling commercials. The eCycling commercials informed of the environmental hazards and the proper disposal of electronic products.

MDE in the Classroom



MDE promotes "MDE in the Classroom" as part of the Governor's education initiative and MDE's Managing Maryland for Results goals. MDE offers various displays, presentations and demonstrations that travel to schools and events throughout Maryland. Activity lesson plans are also distributed to teachers of all grades as requested. In the 2002-2003 school year, MDE reached 2,094 students and teachers at 20 Maryland schools. An additional 115 students were reached in the summer at camps and summer schools.

Grades K-4 receive a Power Point presentation that discusses:

- What is your environment;
- How we use our environment;
- What MDE does;
- Waste facts;
- Recycling; and
- Source reduction and reuse.

A hands-on waste sorting activity helps students understand how to recycle and a group discussion on a story that incorporates all of the discussion points in the Power Point presentation helps the students remember what they learned.

Grades 5-8 receive a Power Point presentation that discusses:

- ▶ What is your environment;
- ▶ How we use our environment;
- ▶ What MDE does;
- ▶ Environmental pollution & litter prevention;
- ▶ Waste facts;
- ▶ Recycling process;
- ▶ Source reduction & reuse;

- ▶ Buy recycled; and
- ▶ Household hazardous waste.

Hands-on demonstrations include a landfill model, a water quality model, and recycled content products.

Grades 9-12 receive a Power Point presentation that discusses:

- ✕ The organizational structure of MDE;
- ✕ The responsibilities and laws associated with waste diversion;
- ✕ MDE's recycling initiatives and programs;
- ✕ Waste generation;
- ✕ Recycling process;
- ✕ Source reduction and reuse;
- ✕ Buying recycled; and
- ✕ Household hazardous waste.



Hands-on demonstrations include a landfill model, a water quality model, and recycled content products.

America Recycles Day (ARD)



America Recycles Day (ARD) is a national event that promotes recycling, source reduction and buying products made from recycled materials as objectives to a more sustainable society. MDE was a supporter of the fifth annual America Recycles Day in Maryland and organized the "Rethink Recycling" sculpture contest held on November 12, 2002.

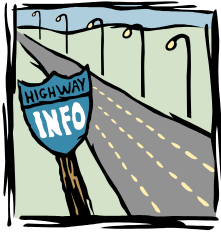
The "Rethink Recycling" sculpture contest was held at the American Visionary Art Museum in Baltimore and featured sculptures from 31 high school students across central Maryland. With instruction to create a sculpture that promotes "America Recycles Day", students made sculptures from CDs, cardboard, car parts, plastic bottles, chicken wire and a toilet. The sculpture contest challenged students to innovatively and artistically use recycled or reused materials as a solution to waste reduction. The event was given national recognition in the November 25, 2002, *Waste News*.



MDE Web Site

Information on Maryland's recycling activities can be found on MDE's recycling web page at www.mde.state.md.us/recycling. The web page includes

information on:



State and County recycling programs, special projects (e.g., electronics and mercury recycling, composting, and household hazardous waste), tire recycling, setting up recycling programs at work and school, State agency recycling (All StAR), educational resources, outreach activities, and links to other sites. New information is added as it becomes available. MDE's website also offers Maryland's citizens and businesses the opportunity to e-mail MDE with questions or comments on recycling.

County Recycling & Solid Waste Managers Forums

MDE organizes joint quarterly County Solid Waste and Recycling Manager meetings in Maryland throughout the year. These meetings offer managers the opportunity to network and share ideas and insight to efficiently promote solid waste management. MDE reports on the latest recycling activities, trends, legislative and regulatory changes. Speakers from industry and government are brought in to educate local governments on issues including media and public education, new technologies, and new initiatives such as electronics recycling and reducing mercury in the environment. In an effort to keep these forums focused and relevant, County managers are periodically surveyed regarding the meeting format and their technical support needs.

MRA Tonnage Report Work Group

In October 2001, MDE formed a Maryland Recycling Act Tonnage Report Work Group to examine ways to improve the current reporting system. Group members include county recycling coordinators, a materials recovery facility operator, a representative from the Northeast Maryland Waste Disposal Authority, a representative of the Maryland Environmental Service, and a representative of a hauling company. The Group has been meeting monthly and has compiled final recommendations that will be presented to the County representatives in the Fall of 2003 for discussion and implementation suggestions.



Free Friday Flicks

On July 11, 2003, MDE participated in Fox45's and WB54's "Free Friday Flicks" television event at Kinder Farm Park in Anne Arundel County. Approximately 6,000 people attended the event that included booths from local police, the Baltimore Aquarium, MDE, and others. MDE's interactive exercise allowed children to make a planter from paint, glitter, and recycled soda bottles. They were also provided a seed packet to take home for planting. MDE staff was able to talk with adults about environmental issues and provide handouts on



recycling, mercury reduction, household hazardous waste days, electronics recycling, buying recycled content items, and scrap tire management, while children were entertained and learned about recycling and reuse. Mercury-free thermometer cards were also distributed at the event.

Earth Day Grocery Bag Project

The Baltimore Public Works Museum, Canton Safeway, and MDE organized an Earth Day Grocery Bag Project. Students and children who visited the Baltimore Public Works Museum in April, 2003, had the opportunity to decorate paper grocery bags with the environmental message to "Reduce, Reuse, and Recycle." Activity papers and fact sheets on recycling, water conservation, and waste reduction were distributed to children and parents during this time. On Earth Day, April 22, 2003, these decorated bags were given to shoppers at the Canton Safeway store to promote recycling in the community.



Maryland Recycling Conference

MDE participated on the planning committee for the 15th Annual Maryland Recyclers Coalition Conference, Training and Exposition held at the Catonsville Campus of the Community College of Baltimore County (CCBC) on May 28-30, 2003. Over 100 representatives from federal, state, and local government, business and the general public attended the conference that included a wide-range of recycling topics. MDE representatives presented at the *"Future of Recycling: Where Do We Go From Here?"*



session and staffed an exhibit with information on recycling, eCycling, mercury reduction, and household hazardous waste.

Scrap Tire Posters

Approximately 1,800 posters were mailed to licensed scrap tire collection sites throughout Maryland (e.g., car dealerships, tire retailers, auto body shops, etc.). The posters were used as an educational tool to inform the public on the uses of recycled scrap tires and to discourage illegal dumping.

Verizon Telephone/Constellation Energy Advertisements

MDE worked with Verizon to place information about electronics recycling in all of the phonebooks distributed in Maryland. In addition, MDE

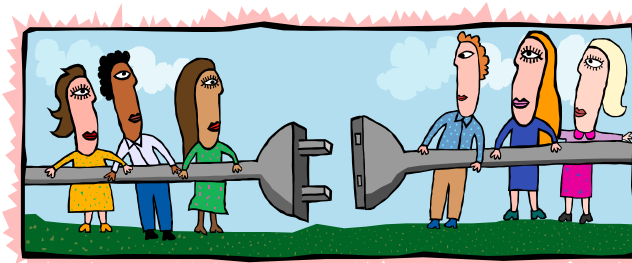


worked with Constellation Energy to place information on electronics recycling in Baltimore Gas & Electric (BGE) bill mailings. This information reached approximately 2 million Marylanders. MDE was also given space in the display window of the downtown BGE Baltimore building that highlighted Maryland's recycling programs and the MDE web site.

Partnerships

MDE recognizes the value of being an active partner with local and regional groups who focus on waste management and recycling issues. The following is a description of MDE's partnerships.

Maryland Recyclers Coalition (MRC) – The MRC (www.marylandrecyclers.org/) is a non-profit, volunteer organization committed to promoting waste reduction,



recycling and the conservation of natural resources. MRC is dedicated to promoting partnerships and cooperation between private and public sectors. MDE advocates the mission of the MRC through

staff and financial support in the form of membership dues and project support. A MDE representative attends monthly MRC meetings and reports MDE's activities and accomplishments to MRC Board members and attendees.

Maryland Environmental Service (MES) – MES (www.menv.com/) recognizes that recycling is an element of effective waste management. MES offers a full range of recycling services to State and local governments including program planning and implementation, facility management and operation, and marketing of materials. MES administers the Maryland Used Oil Recycling Act on behalf of MDE. Information on MES programs are available at mes@menv.com or 1-800-4RECYCLE (1-800-473-2925).

Northeast Maryland Waste Disposal Authority (NMWDA) – The NMWDA (www.nmwda.org/) provides solid waste and bio-solids management to its members – Baltimore City, Anne Arundel, Carroll, Baltimore, Harford, Howard, and Montgomery Counties. The Authority manages three waste-to-energy facilities, and a facility that converts sewage sludge into compost.

Mid-Atlantic Consortium of Recycling and Economic Development Officials (MACREDO) – MDE is a member of MACREDO, a consortium that was established through a grant from the United States Environmental Protection

Agency Region III to promote regional market development efforts for recycled materials. Other members include representatives from Delaware, Pennsylvania, Virginia, West Virginia and the District of Columbia. MACREDO offers a forum for information exchange between member jurisdictions, local authorities, the private sector, and nonprofit organizations.

Information about ongoing projects is available on the MACREDO home page at www.libertynet.org/macredo. These projects involve construction recycling and reuse, electronic product recovery, a recycling markets directory, and mixed paper recovery.

County Waste Diversion Programs

County waste diversion programs are the key to the success of waste diversion in Maryland. MDE works cooperatively with each County to ensure that valuable market and program information is shared, analyzed, and discussed. Table 6 illustrates the elements of Maryland's individual recycling programs. Additionally, MDE's recycling web page contains detailed information on the County recycling programs and source reduction activities.

MDE acknowledges County recycling and solid waste managers for their innovative thinking, hard work and dedication in working to provide education to and implement recycling and source reduction programs with Maryland's citizens and businesses. Highlights of County programs include:

- ❖ Seven counties achieved waste diversion rates greater than the 40% waste diversion goal;
- ❖ Citizens have access to recycling by curbside collection or a regional network of drop-offs or both;
- ❖ All of Maryland's jurisdictions are collecting components of mixed paper, containers, organics, and white goods;
- ❖ Fifteen counties operate textile collection programs;
- ❖ Four counties have permanent electronic recycling programs and 22 of 24 jurisdictions have participated in eCycling either through established programs or special eCycling events;
- ❖ Twelve counties and Baltimore City have established mercury drop-off locations and 17 of 24 jurisdictions have participated in mercury collection either through established drop-off locations or special mercury collection events;
- ❖ Seven counties collect paint for recycling;
- ❖ Three counties recycle boat shrink-wrap;
- ❖ Eighteen counties operate Household Hazardous Waste Programs; and
- ❖ Thirteen counties earned source reduction credits.

It is important to remember that waste diversion programs are always evolving. Appendix A includes names, addresses, and phone numbers of Maryland's recycling coordinators who can provide the most current information about waste diversion in their jurisdiction. For

additional information, log onto MDE's recycling web page at www.mde.state.md.us/was/recycling and click on "State, County and City Recycling Information."

Table 6 -- County Residential Recyclables by Commodity

County	Mixed Paper – Containers – Organics*	White Goods	Lead-Acid Batteries	Oil/ Antifreeze	Established Electronic Drop-offs	Paints	Textiles	Hg°	HHW~	Comments^
Allegany	✓	✓		✓/✓			✓	✓	✓	eCycle, mercury; No books or plastic containers
Anne Arundel	✓	✓	✓	✓/✓		✓			✓	eCycle, wood pallets, C & D, scrap metal
Baltimore City	✓	✓	✓	✓/✓				✓	✓	eCycle, household batteries, C & D
Baltimore County	✓	✓	✓	✓/✓		✓			✓	eCycle, gas, usable building material
Calvert	✓	✓	✓	✓/✓		✓	✓	✓	✓	eCycle, mercury, oil filters, ink-jet cartridges
Caroline	✓	✓	✓	✓/✓			✓		✓	eCycle; No colored paper, books, magazines, x-mas tree; Mid-shore program member
Carroll	✓	✓	✓	✓/✓			✓	✓		eCycle, asphalt roof shingles, swap shop
Cecil	✓	✓	✓	✓/✓				✓		eCycle, wood pallets
Charles	✓	✓	✓	✓/✓			✓	✓	✓	eCycle, mercury, household batteries, oil filters; No books, paperboard
Dorchester	✓	✓		✓/✓				✓		eCycle, crab chum composting; No books
Frederick	✓	✓	✓	✓/✓			✓		✓	eCycle, pesticide bottles, wood pallets, propane; No books
Garrett	✓	✓		✓/✓				✓		mercury ; No cardboard, magazines, books
Harford	✓	✓	✓	✓/✓		✓	✓			eCycle, mercury, gas, pesticide containers; No books
Howard	✓	✓	✓	✓/✓	✓	✓	✓		✓	propane tanks, asphalt roof shingles
Kent	✓	✓	✓	✓/✓			✓	✓	✓	eCycle, mercury, boat shrink-wrap; Mid-shore program member
Montgomery	✓	✓	✓	✓/✓	✓	✓	✓		✓	eCycle, computers, bicycles, reusable building materials
Prince George's	✓	✓	✓	✓/✓	✓				✓	mercury; handicapped program
Queen Anne's	✓	✓		✓/✓			✓	✓	✓	eCycle, Mid-shore program member; boat shrink-wrap
St. Mary's	✓	✓	✓	✓/✓		✓	✓		✓	eCycle, mercury, pesticide containers
Somerset	✓	✓		✓/✓						No books
Talbot	✓	✓	✓	✓/✓			✓		✓	eCycle, boat shrink-wrap; Mid-shore program member
Washington	✓	✓	✓	✓/✓			✓	✓		No books
Wicomico	✓	✓		✓/✓	✓		✓		✓	eCycle, wood pallets; No books
Worcester	✓	✓	✓	✓/✓				✓	✓	eCycle, mercury

* Unless otherwise noted in the **Comments Column**, Mixed Paper includes: all paper types, books, cardboard, magazines, newspaper, and telephone books; Containers include: glass, metal, and plastic; Organics include: yard trimmings and x-mas tree recycling. ° Established Mercury Drop-offs ~ Household Hazardous Waste Collection Day ^eCycle = electronics recycling

APPENDIX A

County Recycling Coordinators

Allegany

Ms. Terry Bennett
Recycling Coordinator
Allegany County Dept. of Public Works
701 Kelly Road
Cumberland, Maryland 21502
Phone: 301-777-5933
Fax: 301-777-2001
E-mail: tbennett@allconet.org

Anne Arundel

Ms. Tracie Reynolds
Recycling Manager
Waste Management Services
2662 Riva Road, MS-7406
Annapolis, Maryland 21401
Phone: 410-222-7951
Fax: 410-222-4484
E-mail: pwreyn26@mail.aacounty.org
Ms. Carol Taylor, Design Implementation Specialist
Ms. Jennifer M. Peterson-Helmecki,
Education/Outreach Specialist

Baltimore

Mr. Charles Reighart
Recycling Coordinator
County Office Bldg.
111 W. Chesapeake Avenue
Towson, Maryland 21204
Phone: 410-887-2000
Fax: 410-887-2931
E-mail: creighart@co.ba.md.us
Mr. Clyde Trombetti, Public Info. Specialist
Ms. Laura Norman, Public Info. Specialist
Mr. Joe Pistorio, Public Info. Specialist

Baltimore City

Mr. Robert Smith
Chief of Collections
Bureau of Solid Waste
200 Holliday Street
Baltimore, Maryland 21202
Phone: 410-396-5620
Fax: 410-545-6117
E-mail: robert.smith@baltimorecity.gov

Calvert

Mr. Tom Parran
Ms. Shirley Steffey
Office of Recycling
P.O. Box 1330, 401 Sweetwater Road
Lusby, Maryland 20657
Phone: 410-326-0210
Fax: 410-586-9461
E-mail: parrant@co.cal.md.us
steffesj@co.cal.md.us

Caroline

Mr. Marshall Monteith
Recycling Coordinator
Dept. of Public Works
520 Wilmuth Street
Denton, Maryland 21629
Phone: 410-479-4040
Fax: 410-479-0409
E-mail: mmonteith@pubworks.caroline.md.us

Carroll

Ms. Venzena Legge
Manager, Recycling Operations
Dept. of Public Works
225 North Center Street, Room 200
Westminster, Maryland 21157-5194
Phone: 410-386-2633
Fax: 410-840-8279
E-mail: vlegge@cgc.carr.org

Cecil

Mr. Phil Hoderfield
Recycling Crew Leader
758 E. Old Philadelphia Road
Elkton, Maryland 21921
Phone: 410-996-6275
Fax: 410-287-4608
E-mail: phoderfield@ccgov.org

Charles

Ms. Lowry Phelps
Dept. of Public Facilities
1001 Radio Station Road
La Plata, Maryland 20646
Phone: 301-932-3599
Fax: 301-932-3449
E-mail: phelps1@govt.co.charles.md.us

Dorchester

Mr. Bob Tenanty
Dorchester Co. Dept. of Solid Waste
5435 Handley Road
Cambridge, Maryland 21613
Phone: 410-228-2920
Fax: 410-228-9516
E-mail: btentanyl@docogonet.com

Frederick

Mr. Phil Harris
Recycling Coordinator
Dept. of Solid Waste
9031 Reichs Ford Road
Frederick, Maryland 21704
Phone: 301-696-2960
Fax: 301-631-3044
E-mail: pharris@fredco-md.net

Garrett

Mr. Andrew Damon
Garrett County Office of Solid Waste
3118 Oakland-Sang Run Road
Oakland, Maryland 21550
Phone: 301-387-0322
Fax: 301-387-2224
E-mail: adamon@garrettcountry.org

Harford

Mr. C. Robert Ernst
Recycling Coordinator
Division of Environmental Affairs
3135 Scarboro Road
Street, Maryland 21154
Phone: 410-638-3417
Fax: 410-6384019
E-mail: cernst@co.ha.md.us

Howard

Mr. Phil Bresee
Chief, Recycling Division
Bureau of Environmental Services
6751 Columbia Gateway Drive
Columbia, Maryland 21046
Phone: 410-313-6444
Fax: 410-313-6490
E-mail: pbresee@co.ho.md.us
Ms. Kim Reichart, Recycling Coordinator

Kent

Mr. Martin T. Holden
Waste Management Coordinator
Kent County Public Works
709 Morgnec Road, Suite 104
Chestertown, Maryland 21620
Phone: 410-778-7448
Fax: 410-778-7424
E-mail: mholden@kentgov.org

Midshore Regional Recycling Program

Mr. James Wood
Midshore Recycling Program
Queen Anne's Co. Dept. of Public Works
P.O. Box 56
Centreville, Maryland 21617
Phone: 410-758-6605
Fax: 410-758-6606
E-mail: jwood@friend.ly.net
(Kent, Queen Anne's, Talbot, Caroline)

Montgomery

Ms. Eileen Kao
Division of Solid Waste Services
101 Monroe Street, 6th Floor
Rockville, Maryland 20850
Phone: 240-777-6400
Fax: 240-777-6465
E-mail: eileen.kao@montgomerycountymd.gov

Prince George's

Mr. Marcelino Cole
Recycling Manager
Office of Recycling
9400 Peppercorn Place, 2nd Floor
Largo, Maryland 20774
Phone: 301-883-5045
Fax: 301-883-7645
E-mail: macole@co.pg.md.us
Ms. Carol Bracaglia, Asst. Section Head
Ms. Marilyn Rybak, Planner

Queen Anne's

Mr. Charles Brown
Recycling Coordinator
P.O. Box 56
Centreville, Maryland 21617
Phone: 410-758-2697
Fax: 410-758-6606
E-mail: cbrown@qac.org

Somerset

Mr. Charles Cavanaugh
Director of Solid Waste Management
Somerset County Government
11916 N. Somerset Avenue
Princess Anne, Maryland 21853
Phone: 410-651-9641
Fax: 410-651-1156
E-mail: ccavanaugh@co.somerset.md.us

St. Mary's

Mr. Richard Tarr
Recycling Coordinator
Engineering Services
P.O. Box 508
California, Maryland 20619
Phone: 301-863-8400
Fax: 301-863-8810
E-mail: richard_tarr@co.saint-marys.md.us

Talbot

Mr. Derick Brummell
Recycling Coordinator
Dept. of Public Works
605 Port Street
Easton, Maryland 21601
Phone: 410-770-8168
Fax: 410-770-8176
E-mail: derickb@talbgov.org

Washington

Mr. Harvey Hoch
Recycling Coordinator
12630 Earth Care Road
Hagerstown, Maryland 21740
Phone: 240-313-2796
Fax: 240-313-2791
E-mail: hhoch@washco-md.net

Wicomico

Mr. Rai Sharma
Director, Public Works
P.O. Box 968
Salisbury, Maryland 21803-0968
Phone: 410-548-4810
Fax: 410-548-4941
E-mail: psharma@wicomocounty.org

Worcester

Mr. Ronald Taylor
Recycling Coordinator
Central Facility Landfill
7091 Central Site Lane
Newark, Maryland 21841
Phone: 410-632-3177
Fax: 410-632-3000
E-mail: rtaylor@co.worcester.md.us